

# AUDIO

## FAQ

**Q** I listen to a lot of compilation albums where the tracks are mixed together. Why does my MP3 player insert gaps between each track?

**A** Most audio CDs are meant to have silence between each track, but MP3 players that add silence can be annoying with albums that run as a continuous stream of music. It's not the player's fault, though, as the problem occurs during encoding.

MP3 and other compressed formats store audio as discrete blocks of information a few milliseconds long, rather than as a continuous waveform. Unless the blocks fit the song length exactly, a small amount of silence will be added to the end of the encoded file.

The player can't tell whether this silence is part of the original music or a side-effect of compression. Some players can make an educated guess and remove what they recognise as unwanted gaps, although our tests show it's not a foolproof system.

**Ben Pitt**

Music and photography expert

ben@computershopper.co.uk

## BEHRINGER B-Control DeeJay BCD2000

★★★★★

£106 inc VAT

DJ software is a fun idea, but if you want to get the dance floor pumping to your MP3 collection, a mouse is a poor substitute for record decks and a cross-fader. Behringer's BCD2000 provides both hardware and software to turn your PC into a capable DJ console, including a four-channel USB audio interface for separate main and headphone mixes. There's even a conventional DJ mixer built in so you can use it with external turntables and a microphone, while one of the phono inputs can be switched to line in for connecting a CD source or hardware MP3 player.

You have to rummage around on the included CD to find the driver and DJ software, and we found newer versions of both online. Once installed, the sound card settings and mapping of the control surface was handled automatically; all that was left was to fire up the software and start mixing.

The software largely mirrors the hardware controls, but it adds a music browser and waveform displays of the two loaded tracks. The browser's Explorer view behaved temperamentally – we found it easier to browse for music with iTunes and drag them across – but imported tracks can be arranged into custom lists and recalled at a later date.

Otherwise, the software is comprehensive, with three-band equalisation, kill switches (for removing chunks of the audio spectrum), filters and support for DirectX effects. Automatic tempo detection is built in, but it's far



from accurate. Still, the whole point of the hardware controls is to match the tempo of tracks manually. The only real drawback is that the Loop feature is locked to the detected tempo, which is often wrong.

The control surface is packed with features and makes light work of cueing and tempo-matching tracks, although we'd prefer it if the pitch sliders had more resolution. There are comprehensive headphone mix options, dedicated gain and EQ controls plus various configurable buttons and knobs. The two wheels can be used to nudge a track to keep it in time with another or for full-on scratching, although it's easy to knock one of the other controls in the process.

The B-Control DeeJay BCD2000 isn't the only product of its kind, but it's more affordable and better equipped than the competition. During our testing, it occasionally started behaving erratically and required a software restart, so it's not up to the demands of professional use. Still, for parties and having lots of fun, it's perfect.

Ben Pitt

### SUMMARY

- ✓ Good hardware and software bundle
- ✓ Great price
- ✗ Prone to occasional errors

USB DJ CONTROLLER XLR, phono and phono/line inputs, line and headphone outputs, 24-bit 48kHz sample rate, USB interface  
REQUIRES Windows XP  
PART CODE BCD2000  
SUPPLIER www.dolphinmusic.co.uk  
DETAILS www.behringer.com

## Also consider...

### PHILIPS SLA5520

★★★★★

£78 inc VAT

**PHILIPS** Philips' SLA5520 takes music from your PC via a wireless network and plays it on your hi-fi. It comes with Philips' own server program, but you can also use it with Windows Media Connect.

The SLA5520 is quite a basic device, but it's a great buy if you want an easy way to play your music wirelessly.



WIRELESS NETWORK MUSIC PLAYER  
Supports MP3, WAV, WMA, WMA-DRM, 802.11g interface, WEP or WPA encryption, 3.5mm socket audio output.  
REQUIRES Windows 2000/XP  
SUPPLIER <http://uk.insight.com>  
DETAILS [www.philips.com](http://www.philips.com)  
✓ Good value ✗ Screen is hard to read  
FULL REVIEW Feb 2007

### LOGITECH X-230

★★★★★

£26 inc VAT

**LOGITECH** Logitech's X-230 were the most affordable 2.1 channel speakers in our recent Labs test, but they sounded better than much more expensive competitors. Each satellite's drivers are visible through a cloth net covering, while the compact subwoofer is protected by a sturdy metal grille.

These speakers could do with a second audio input, longer cables and an easy to reach bass level control, but they're outstanding for this price. Though not amazingly loud, they look superb and produce detailed and balanced sound.

2.1 SPEAKERS Line input, 32W RMS power  
PART CODE 970123-0120  
SUPPLIER [www.amazon.co.uk](http://www.amazon.co.uk) DETAILS  
[www.logitech.co.uk](http://www.logitech.co.uk) ✓ Excellent sound  
✗ Only one input FULL REVIEW Apr 2006



### LOGITECH Z-5450

★★★★★

£199 inc VAT

**LOGITECH** Logitech's Z-5450 5.1 surround-sound speakers transmit sounds to the rear set wirelessly, so you'll have less clutter in your living room. Sound quality is excellent and the speakers are loud.

With loads of inputs and a decoder, these speakers are perfect for your PC or DVD player.



5.1 SPEAKERS Three line inputs, one coaxial and two optical digital inputs, 315W RMS power  
PART CODE 970191-0120  
SUPPLIER [www.dabs.com](http://www.dabs.com)  
DETAILS [www.logitech.co.uk](http://www.logitech.co.uk)  
✓ Sound great; loads of features  
✗ Expensive FULL REVIEW Dec 2006

## LOGITECH X-540

★★★★★

£58 inc VAT



Logitech's X-540 speaker set sits just above the X-530, which won a Budget Buy award in our April 2006 speaker Labs test. The X-540's volume knob and headphone socket reside in a wired remote control. This also houses a Matrix button, which up-mixes stereo sources to give a surround-sound effect. At little over a metre, the cable that joins the front left and right satellites is still too short for some rooms.

We couldn't find much to criticise about the X-530's sound quality, but if anything the X-540 marginally improves on it. It has even deeper bass and sound is more defined at the top end, while maintaining the same even response in between. Upper-mid frequencies could be cleaner, but the overall sound quality surpasses that of sets costing over twice as much.

The X-540 set isn't much more suited to games than the X-530, but its excellent sound, remote control and up-mix ability make it just as good value. For small rooms, there's little reason to spend any more.

Ben Pitt

### SUMMARY

- ✓ Excellent sound quality
- ✓ Low price
- ✗ No aux input

5.1 SPEAKERS Three line inputs, 71W RMS power  
PART CODE 970223-0120  
SUPPLIER [www.dabs.com](http://www.dabs.com)  
DETAILS [www.logitech.co.uk](http://www.logitech.co.uk)

## PHILIPS SA9200

★★★

£110 inc VAT



Philips' SA9200 is just as stylish as the iPod Nano and, at 47g, just a tad heavier. It has Microsoft's PlayForSure logo, so you can use Windows Media Player 10 for both music and photos, and the player can handle protected WMA files bought from various online stores. It can also display photos on its 1.7in colour screen. Charging is via USB only and the 14½-hour battery life is average.

Menus are straightforward and attractive, but we found the vertical touch-sensitive scroll pad erratic. Sound quality is up to scratch, but the headphones' thin bass response makes them unsuitable for some music.

The SA9200 is a reasonable MP3 player, but it is expensive. A 2GB iPod nano costs around £100, and Sandisk's 6GB Sansa e270 (below) costs just a few pounds more and is a better choice.

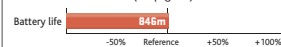
Ben Pitt

### SUMMARY

- ✓ Attractive design
- ✗ Expensive for a 2GB player
- ✗ Erratic controls

SOLID STATE MP3 PLAYER 2GB capacity, supports MP3, WMA and WMA-DRM audio and JPEG image formats, USB Hi-Speed interface  
PART CODE SA9200/05  
SUPPLIER [www.argos.co.uk](http://www.argos.co.uk)  
DETAILS [www.philips.co.uk](http://www.philips.co.uk)

### PERFORMANCE (see page 56)



## CHOOSING A... Speaker System

Follow the steps to find your ideal specs

**SURROUND FORMAT:** Stereo

**RMS POWER:** 5W

**INPUTS:** 1x analogue

**BUILT-IN DECODING:** None

Recommended minimum in grey

**1** PC speaker systems, which consist of speakers and an amplifier to power them, can cost anything from £5 to £300. The cheapest sets, with the specifications shown in grey above, will be fine for those who simply want to play Windows alert noises on a PC they use solely for work.

**2** Those who use their PC for any kind of entertainment should go for a better system. The first thing to look for is a subwoofer, which handles bass frequencies, while the satellites output mid- and high-frequency sounds.

Other than this, the best way to establish the quality of a system is to consult our reviews. Specifications don't tell you much and the price of a system often bears little relation to its actual performance.

**3** Games and DVDs will benefit greatly from a surround-sound system. The standard surround configuration is 5.1, which consists of five satellite speakers and one subwoofer, but those who must have the latest technologies should consider 6.1 or 7.1 speakers, plus a compatible sound card that is capable of supporting the extended Dolby Digital EX format.

**4** The power rating can give you a rough idea of how loud the speakers will go. Ignore PMPO or Peak Power ratings, which can be as much as 40 times the RMS figure.

A 50W RMS system should provide ample volume for a desktop PC, but for a home cinema look for 100W RMS or more.

**5** Stereo speakers just need a single analogue stereo input, while a 5.1 system needs three. Surround-sound systems incorporating Dolby Digital decoders must be fed through an S/PDIF digital input, which comes in (non-compatible) coaxial and optical versions. However, as Dolby Digital decoding can be handled in software, surround speakers with analogue inputs are far more cost-effective.

## LOGITECH AudioStation

★★★★★

£123 inc VAT



Logitech's AudioStation is a mid-range iPod speaker dock, but it sounds better than many that cost more. It's the only dock we've tested with an FM tuner, a sensible addition given that no iPod has its own. Although you can't synchronise a docked iPod with your computer, the AudioStation is great value, and the first iPod dock to deserve our Best Buy award.



IPOD DOCK STEREO SPEAKERS iPod dock connector and 3.5mm stereo line input, composite and S-video outputs, FM radio, 80W RMS power PART CODE 970217-0120 SUPPLIER [www.amazon.co.uk](http://www.amazon.co.uk) DETAILS [www.logitech.co.uk](http://www.logitech.co.uk)  
✓ Clear, loud sound ✗ No iPod PC connector FULL REVIEW Jan 2007

## SANDISK Sansa e270

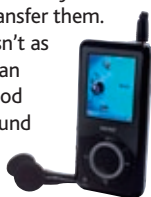
★★★★★

£117 inc VAT



Sandisk's Sansa e270 has 6GB of storage, but it costs about the same as Apple's 4GB iPod Nano. Unlike the Nano, it can play back video files on its colour screen; its software makes it easy to convert and transfer them.

The e270 isn't as easy to use as an iPod, but its good battery and sound make it a great choice.



FLASH MP3 PLAYER 6GB capacity, supports MP3, WMA and WMA-DRM music, JPEG and bitmap picture files and proprietary video files (recorder supplied), USB Hi-Speed interface PART CODE SDMX4-6144 SUPPLIER [www.dabs.com](http://www.dabs.com) DETAILS [www.sandisk.co.uk](http://www.sandisk.co.uk) ✓ Lots of space; good sound ✗ Nano has better controls FULL REVIEW Feb 2007

## APPLE iPod Shuffle

★★★★★

£54 inc VAT



Apple's tiny iPod Shuffle is affordable and beautifully designed. It's very light, with an integrated metal clip that grips clothing securely. The controls are basic: there is just track skip, so it can take ages to find a specific song. Battery life and sound are both good, though, so it's a great player if you can live without a screen and don't mind using iTunes.



FLASH MP3 PLAYER 1GB capacity, supports MP3, AAC, protected AAC, Wav, AIFF, audible and Apple lossless music, USB Hi-Speed interface PART CODE MA564ZT/A SUPPLIER [www.dabs.com](http://www.dabs.com) DETAILS [www.apple.com/uk](http://www.apple.com/uk)  
✓ Tiny; great design ✗ No display FULL REVIEW Feb 2007